

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Avner YAYON *et al.*

Application No.:

Group Art Unit:

Filing Date: Concurrently herewith

Examiner:

For: ANTIBODIES THAT BLOCK RECEPTOR
PROTEIN TYROSINE KINASE ACTIVATION

Attorney Docket No.: 81408-4400

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

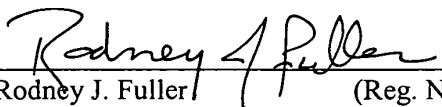
Pursuant to applicants' duty of disclosure under 37 C.F.R. § 1.56, enclosed is a Form PTO-1449 containing eighty-one (81) references for the Examiner's review and consideration. Copies of references B1-B15 and C1-38 are also enclosed. Copies of references A1-A28 will be provided if the Examiner so requests.

It is respectfully requested that the references be made of record in this application by the Examiner's completion and return of the enclosed Form PTO-1449.

This Information Disclosure Statement is filed under 37 C.F.R. § 1.97(b) before the latter of three months after the U.S. patent application filing date or the first Office Action on the merits. Accordingly, no fee or certification is required. Should any fees be required, however, please charge such fees to Winston & Strawn LLP Deposit Account No. 50-1814.

Respectfully submitted,

12/15/03
Date


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WINSTON & STRAWN LLP
Customer No. 28765

202-371-5838

LIST OF REFERENCES CITED BY APPLICANT Form PTO-1449 <i>(Use several sheets if necessary)</i>	ATTY. DOCKET NO.:	APPLICATION NO.:
	81408-4400	
	APPLICANT:	
	Avner YAYON, et al.	
Sheet 1 of 4	FILING DATE:	GROUP:
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U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	4,376,110	03/1983	David et al.	435	5	
	A2	4,816,567	03/1989	Cabilly et al.	530	387.3	
	A3	4,946,778	08/1990	Ladner et al.	435	69.6	
	A4	4,966,849	10/1990	Vallee et al.	435	199	
	A5	5,091,513	02/1992	Huston et al.	530	387.3	
	A6	5,096,815	03/1992	Ladner et al.	435	69.1	
	A7	5,225,539	07/1993	Winter	530	387.3	
	A8	5,330,992	07/1994	Eissenstat et al.	514	312	
	A9	5,459,015	10/1995	Janjic et al.	435	6	
	A10	5,530,101	06/1996	Queen et al.	530	387.3	
	A11	5,585,089	12/1996	Queen et al.	424	133.1	
	A12	5,677,171	10/1997	Hudziak et al.	435	7.23	
	A13	5,693,761	12/1997	Queen et al.	536	23.53	
	A14	5,693,762	12/1997	Queen et al.	530	387.3	
	A15	5,707,632	01/1998	Williams et al.	424	198.1	
	A16	5,772,997	06/1998	Hudziak et al.	424	130.1	
	A17	5,840,301	11/1998	Rockwell et al.	424	143.1	
	A18	5,910,573	06/1999	Pluckthun et al.	530	387.3	
	A19	5,942,602	08/1999	Wels et al.	530	388.22	
	A20	6,129,915	10/2000	Wels et al.	424	143.1	
	A21	6,165,464	12/2000	Hudziak et al.	424	142.1	
	A22	6,183,975	02/2001	Gargus et al.	435	7.21	
	A23	6,214,974	04/2001	Rosenblum et al.	530	391.9	
	A24	6,294,353	09/2001	Pack et al.	435	69.1	
	A25	6,300,064	10/2001	Knappik et al.	435	6	
	A26	6,342,219	01/2002	Thorpe et al.	424	145.1	
	A27	6,365,157	04/2002	Rockwell et al.	424	156.1	
	A28	6,399,063	06/2002	Hudziak et al.	424	138.1	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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Sheet 2 of 4	FILING DATE:	GROUP:
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FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	B1	0 125 023		EPO				
	B2	0 171 496		EPO				
	B3	0 173 494		EPO				
	B4	0 184 187		EPO				
	B5	WO 86/01533		WIPO				
	B6	WO 87/02671		WIPO				
	B7	WO 90/07861		WIPO				
	B8	WO 92/22653		WIPO				
	B9	WO 93/15210		WIPO				
	B10	WO 94/10202		WIPO				
	B11	WO 94/14808		WIPO				
	B12	WO 96/13583		WIPO				
	B13	WO 96/37621		WIPO				
	B14	WO 97/08320		WIPO				
	B15	WO 00/68424		WIPO				

OTHER REFERENCES <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>		
C1	Baselga and Albanell, Mechanism of action of anti-HER2 monoclonal antibodies. Ann Oncol. 12 Suppl 1:S35-41 (2001)	
C2	Bellus et al., Identical mutations in three different fibroblast growth factor receptor genes in autosomal dominant craniosynostosis syndromes. Nature Genetics, 14:174-76 (1996)	
C3	Better et al, ", Escherichia coli secretion of an active chimeric antibody fragment. Science 240(4855):1041-43 (1988)	
C4	Billerey, et al., Frequent FGFR3 mutations in papillary non-invasive bladder (pTa) tumors. Am J Pathol. 158(6):1955-9 (2001)	
C5	Blume-Jensen and Hunter, Oncogenic kinase signalling. Nature 411:355-65 (2001)	
C6	Boulianne et al, Production of functional chimaeric mouse/human antibody. Nature 312(5995):643-646 (1984)	
C7	Cabilly, et al., Generation of antibody activity from immunoglobulin polypeptide chains produced in Escherichia coli. PNAS U S A, 81(11):3273-7 (1984)	

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C8	Cappellen et al., Frequent activating mutations of FGFR3 in human bladder and cervix carcinomas. Nature Genetics, 23:18-20 (1999)	
C9	Chesi et al., Activated fibroblast growth factor receptor 3 is an oncogene that contributes to tumor progression in multiple myeloma. Blood, 97(3):729-736 (2001)	
C10	Frank, Growth factors in age-related macular degeneration: pathogenic and therapeutic implications. Ophthalmic Res 29:341-53 (1997)	
C11	Galvin et al., Constitutive receptor activation by Crouzon syndrome mutations in fibroblast growth factor receptor (FGFR)2 and FGFR2/Neu chimeras. PNAS USA, 93:7894-99 (1996)	
C12	Gerwins et al., Function of fibroblast growth factors and vascular endothelial growth factors and their receptors in angiogenesis. Crit Rev Oncol Hematol 34(3):185-94 (2000)	
C13	Grigoriadis et al, Differentiation of muscle, fat, cartilage, and bone from progenitor cells present in a bone-derived clonal cell population: effect of dexamethasone. J Cell Biol 106(6):2139-51 (1988)	
C14	Knappik et al., Fully synthetic human combinatorial antibody libraries (HuCAL) based on modular consensus frameworks and CDRs randomized with trinucleotides. J. Mol. Biol., 296:57-86 (2000)	
C15	Kohfeldt et al., Properties of the extracellular calcium binding module of the proteoglycan testican. FEBS Lett. 414:557-561, 1997	
C16	Kohler and Milstein, Continuous cultures of fused cells secreting antibody of predefined specificity. Nature, 256(5517):495-497 (1975)	
C17	Liu et al, Chimeric mouse-human IgG1 antibody that can mediate lysis of cancer cells. PNAS USA. 84(10):3439-3443 (1987)	
C18	Meinkoth and Wahl, Hybridization of nucleic acids immobilized on solid supports., Anal Biochem 138:267-284 (1984)	
C19	Meyers et al., Fibroblast growth factor receptor 3 (FGFR3) transmembrane mutation in Crouzon syndrome with acanthosis nigricans. Nature Genetics, 11:462-464 (1995)	
C20	Morrison et al., Chimeric human antibody molecules: mouse antigen-binding domains with human constant region domains. PNAS USA 81(21):6851-6855 (1984)	
C21	Muenke et al., A unique point mutation in the fibroblast growth factor receptor 3 gene (FGFR3) defines a new craniosynostosis syndrome. Am. J. Hum. Genet., 60:555-64 (1997)	
C22	Neuberger et al, A hapten-specific chimaeric IgE antibody with human physiological effector function. Nature 314(6008):268-270 (1985)	
C23	Ornitz, Regulation of chondrocyte growth and differentiation by fibroblast growth factor receptor 3. Novartis Found Symp 232:63-76; discussion 76-80, 272-82 (2001)	
C24	Ornitz and Itoh, Fibroblast Growth Factors, Genome Biol 2(3):review 3005.1-3005.12 (2001)	
C25	Plowright et al., Ectopic expression of fibroblast growth factor receptor 3 promotes myeloma cell proliferation and prevents apoptosis. Blood 95(3):992-8 (2000)	
C26	Ronchetti, et al., Deregulated FGFR3 mutants in multiple myeloma cell lines with t(4;14): comparative analysis of Y373C, K650E and the novel G384D mutations. Oncogene 20(27):3553-62 (2001)	

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C27	Sahagan, et al., A genetically engineered murine/human chimeric antibody retains specificity for human tumor-associated antigen. J Immunol. 137(3):1066-74 (1986)	
C28	Sahni, et al., FGF signaling inhibits chondrocyte proliferation and regulates bone development through the STAT-1 pathway. Genes Dev. 13(11):1361-6 (1999)	
C29	Saito et al., Receptor heterodimerization: essential mechanism for platelet-derived growth factor-induced epidermal growth factor receptor transactivation. Mol Cell Biol, 21(19):6387-94 (2001)	
C30	Sato et al., Properties of two VEGF receptors, Flt-1 and KDR, in signal transduction. Ann N Y Acad Sci, 902:201-5; discussion 205-7 (2000)	
C31	Saltzman and Langer, Transport rates of proteins in porous materials with known microgeometry. Biophys. J, 55:163 (1989)	
C32	Schell et al., Mutations in FGFR1 and FGFR2 cause familial and sporadic Pfeiffer syndrome. Hum Mol Gen, 4:323-328 (1995)	
C33	Sherwood et al., Controlled antibody delivery systems. Biotechnology, 10(11):1446-9 (1992)	
C34	Tavormina et al., A novel skeletal dysplasia with developmental delay and acanthosis nigricans is caused by a Lys650Met mutation in the fibroblast growth factor receptor 3 gene. Am. J. Hum. Genet., 64:722-31 (1999)	
C35	Vajo et al., The molecular and genetic basis of fibroblast growth factor receptor 3 disorders: the achondroplasia family of skeletal dysplasias, Muenke craniosynostosis, and Crouzon syndrome with acanthosis nigricans. Endocrine Reviews, 21(1):23-39 (2000)	
C36	van Rhijn et al., Molecular grading of urothelial cell carcinoma with fibroblast growth factor receptor 3 and MIB-1 is superior to pathologic grade for the prediction of clinical outcome. J Clin Oncol. 21(10):1912-21 (2003)	
C37	Webster and Donoghue, FGFR activation in skeletal disorders: too much of a good thing. Trends Genetics 13(5):178-82 (1997)	
C38	Yamaguchi et al., Endostatin inhibits VEGF-induced endothelial cell migration and tumor growth independently of zinc binding. EMBO J. 18(16):4414-23 (1999)	

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